



Terra Energy Partners, LLC

SURFACE POST JOB REPORT

FEDERAL WMC 332-20 05-045-24491
S:17 T:7S R:93W Garfield CO

CallSheet #: 84822
Proposal #: 65424



SURFACE Post Job Report

Attention: Mr. Dustin Childers | (936) 524-8828 | dchilders@terraep.com
Terra Energy Partners, LLC
4828 Loop Central Dr., Suite 900 | Houston, TX 77081

Dear Mr. Dustin Childers,

Thank you for the opportunity to provide cementing services on this well. American Cementing strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact American Cementing at any time.

Sincerely,

Krystal Schell

Field Engineer I | (719) 992-1830 | krystal.schell@americacementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 657-1157

Job Details & Summary

Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Casing	Outer	20	19.5	53	n/a	0	84	0
Open Hole	Outer	n/a	13.5	n/a	n/a	80	500	16
Open Hole	Outer	n/a	13.5	n/a	n/a	500	1135	16
Casing	Inner	9.625	8.921	36	n/a	0	1135	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-246	TRC-090	Dragon, Shane
Light Duty Vehicles	LDV-061		Woronovitch, Collin
Cement Pump Float	CPF-052	TRH-957	Brady, Shawn

Timing

Event	Date/Time
Call Out	12/8/2022 08:24
Depart Facility	12/8/2022 08:30
On Location	12/8/2022 09:45
Rig Up Iron	12/8/2022 10:00
Job Started	12/8/2022 11:15
Job Completed	12/8/2022 12:19
Rig Down Iron	12/8/2022 12:30
Depart Location	12/8/2022 14:00

General Job Information

Metrics	Value
Well Fluid Density	8.9 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	600 bbls
Rig Circulation Time	1 hours
Calculated Displacement	84 bbls
Actual Displacement	84 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	44 bbls
Well Topped Out	No

Job Details

Metrics	Value
Flare Prior to Job	No
Flare Prior to Job	0 units
Flare During Job	No
Flare During Job	0 units
Flare at End of Job	No
Flare at End of Job	0 units
Well Full Prior to Job	Yes
Well Fluid Density Into Well	8.9 lb/gal
Well Fluid Density Out of Well	8.9 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	81 °F
BHST	99 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	50 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	200 mg/L	0-3000 mg/L
Total Alkalinity	120	0-1000
Total Hardness	100 mg/L	0-500 mg/L
Carbonates	NA mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	400 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

Circulation

Lost Circulation Experienced
No

Job Execution Information

Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sks)	Volume (bbl)	Designed Top (ft)
1	Water	Flush	8.34			42.00		20.00	0
2	Lead	Lead	12.30	2.21	12.72		165.00	65.04	0
3	Tail	Tail	12.80	1.97	10.87		191.00	66.85	500
4	Water	DisplacementFinal	8.34			42.00		84.00	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Lead	Lead	ASTM TYPE I/II	Cement	100.00	%
2	Lead	Lead	A-7P	Accelerator	2.00	lb/sk
2	Lead	Lead	ATHX-1102	Thixotropic	1.00	lb/sk
2	Lead	Lead	FP-24	Defoamer	0.30	%BWOB
2	Lead	Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Lead	Lead	STATIC FREE	Other	0.01	lb/sk
3	Tail	Tail	ASTM TYPE I/II	Cement	100.00	%
3	Tail	Tail	A-7P	Accelerator	2.00	lb/sk
3	Tail	Tail	ATHX-1102	Thixotropic	1.00	lb/sk
3	Tail	Tail	FP-24	Defoamer	0.30	%BWOB
3	Tail	Tail	IntegraSeal POLI	LostCirculation	0.25	lb/sk
3	Tail	Tail	STATIC FREE	Other	0.01	lb/sk

Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	12/8/2022	08:24					CREW CALLED OUT FOR LOCATION TIME OF READY WHEN ARRIVE
2	Depart Location	12/8/2022	08:30					CREW DEPARTS STAGING PAD FOR RIG LOCATION
3	Arrive On Location	12/8/2022	09:45					CREW AND EQUIPMENT ARRIVED ON LOCATION
4	Rig Up Iron	12/8/2022	10:00					PRE RIG UP MEETING / RIG UP IRON HOSES AND EQUIPMENT
5	Safety Meeting	12/8/2022	11:15					PRE JOB SAFETY MEETING WITH RIG CREW AND COMPANY MAN
6	Fill Lines	12/8/2022	11:33	8.34	5.4	5	231	FILL LINES WITH 5 BBLS OF FRESH WATER
7	Pressure Test Lines	12/8/2022	11:35	8.34			3178	PRESSURE TEST PUMP AND LINES TO 3000 PSI
8	Other	12/8/2022	11:38	8.34	6.1	20	262	PUMP 20 BBLS FRESH WATER SPACER FULL RETURNS
9	Pump Lead Cement	12/8/2022	11:41	12.3	6.1	0	331	BEGIN PUMPING 12.3 PPG LEAD CEMENT, WEIGHT VERIFIED BY MUD SCALE
10	Pump Lead Cement	12/8/2022	11:46	12.3	7	30	420	30 BBLS LEAD CEMENT PUMPED
11	Pump Lead Cement	12/8/2022	11:51	12.3	5	35	240	65 BBLS (165 SKS) LEAD CEMENT PUMPED FULL RETURNS
12	Pump Tail Cement	12/8/2022	11:51	12.8	5	0	243	BEGIN PUMPING 12.8 PPG TAIL CEMENT, WEIGHT VERIFIED BY MUD SCALE
13	Pump Tail Cement	12/8/2022	11:56	12.8	5.5	30	291	30 BBLS TAIL CEMENT PUMPED
14	Pump Tail Cement	12/8/2022	12:04	12.8	4.9	37	240	67 BBLS (191 SKS) TAIL CEMENT PUMPED FULL RETURNS
15	Drop Top Plug	12/8/2022	12:07	8.34	7.1	0	313	DROP PLUG, WITNESSED BY COMPANY MAN. BEGIN PUMPING FRESH WATER DISPLACEMENT, FULL RETURNS
16	Pump Displacement	12/8/2022	12:10	8.34	7.1	20	200	20 BBLS DISPLACEMENT PUMPED, SPACER BACK @ 20 BBLS FULL RETURNS
17	Pump Displacement	12/8/2022	12:13	8.34	9.8	30	651	50 BBLS DISPLACEMENT PUMPED, CEMENT TO SURFACE @ 40 BBLS PUMPED, 44 BBLS TOTAL CEMENT TO SURFACE
18	Pump Displacement	12/8/2022	12:18	8.34	4.1	34	414	84 BBLS TOTAL DISPLACEMENT PUMPED
19	Land Plug	12/8/2022	12:18				1000	PLUG LANDED FCP-414 PSI, BUMPED TO 1000 PSI
20	Check Floats	12/8/2022	12:19					BLEED OFF CHECK FLOATS, FLOATS HELD .5 BBLS BACK
21	Rig Down Iron	12/8/2022	12:30					RIG DOWN MEETING, PICKLE, BLOW DOWN IRON, RIG DOWN EQUIPMENT, IRON AND HOSES
22	Depart Location	12/8/2022	14:00					CREW DEPARTS LOCATION FOR RCO YARD

Pump Diagrams

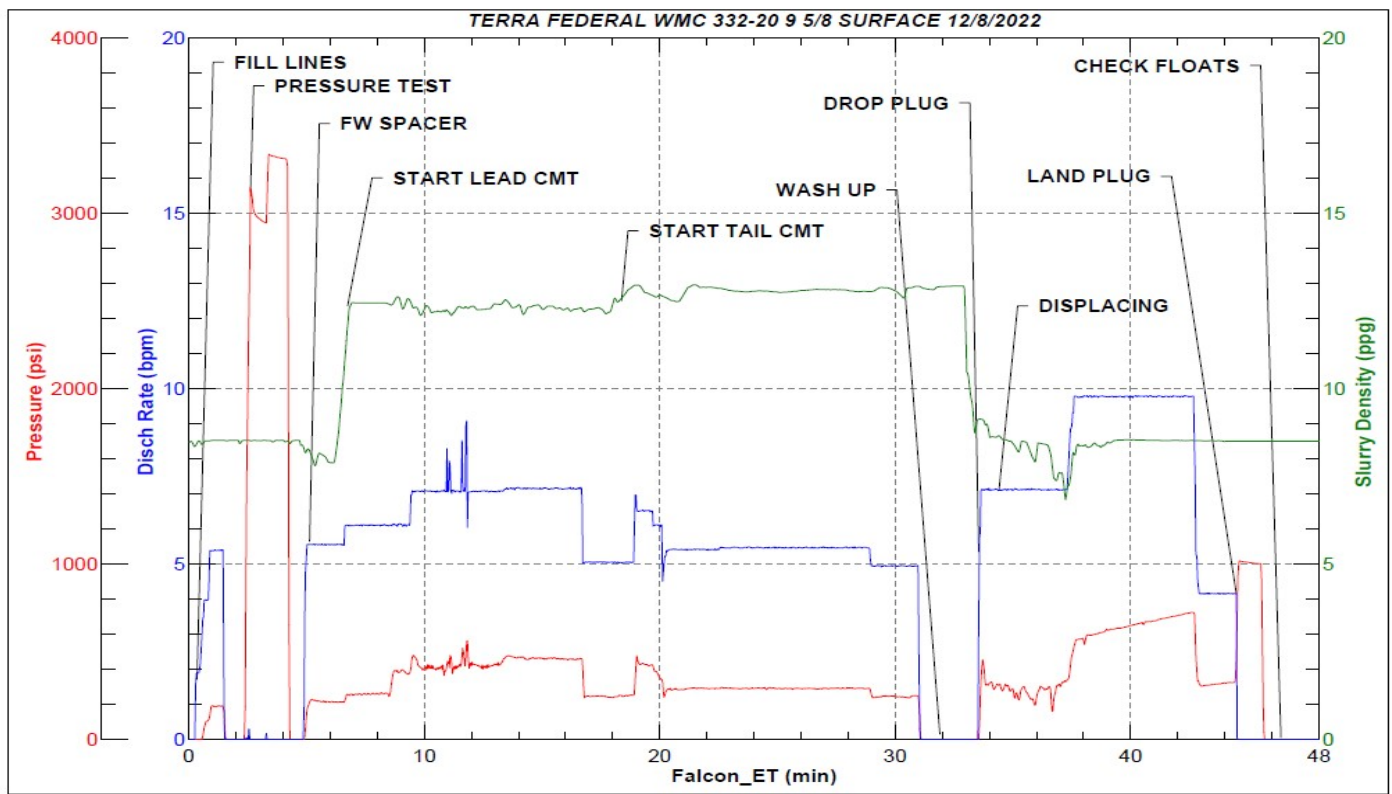


JobMaster Program Version 5.01C1

Job Number: 84822

Customer: TERRA

Well Name: FEDERAL WMC 332-20



Job Start: Thursday, December 08, 2022